

**ANGLO-CHINESE SCHOOL  
(JUNIOR)**



**SEMESTRAL ASSESSMENT 2 (2012)  
PRIMARY 3**

**SCIENCE**

**BOOKLET A**

**Tuesday**

**30 October 2012**

**1 hour 30 minutes**

**Name :** \_\_\_\_\_ (      )

**Class :** P3 \_\_\_\_\_

**INSTRUCTIONS TO PUPILS**

**DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO**

Follow all instructions carefully.

There are 25 questions in this booklet.

Answer ALL questions.

**INFORMATION FOR PUPILS**

The total marks for this booklet is 50.

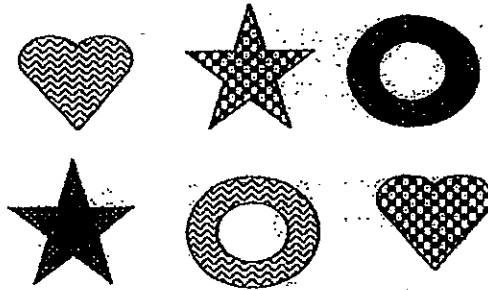
The total time for Booklets A and B is 1 hour 30 minutes.

This question paper consists of 13 printed pages. (Inclusive of cover page)



For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (50 marks)

- 1 Ben and Tom were given some cookies as shown. Each boy grouped them differently from the other as shown in the classification tables below.



Ben			Tom		

Ben grouped the cookies according to their \_\_\_\_\_.

- (1) sizes
- (2) colours
- (3) shapes
- (4) patterns

- 2 Study the table below.

Things		
Group A	Group B	Group C
Postcard	Tie	Tyre
Exercise book	Handkerchief	Eraser
Writing pad	Blouse	Balloon

The objects above are grouped according to \_\_\_\_\_.

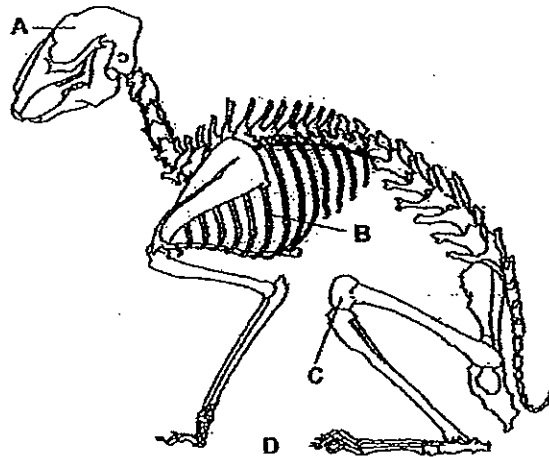
- (1) their size
  - (2) their weight
  - (3) what they are made of
  - (4) what they are used for
- 3 Four children described the things that they have seen.
- Ali: My toy car cannot move anymore. It has died.  
 Tim: My cat purrs when you pat its head..It can respond to changes.  
 Lily: My plant's height changed from 3cm to 5cm. It shows signs of growth.  
 Siti: The leaves are rustling in the wind. They are able to move on their own.

Whose statements are correct?

- (1) Siti and Ali only
  - (2) Ali and Lily only
  - (3) Tim and Siti only
  - (4) Lily and Tim only
- 4 Study the table below. Which of the things are grouped **incorrectly**?

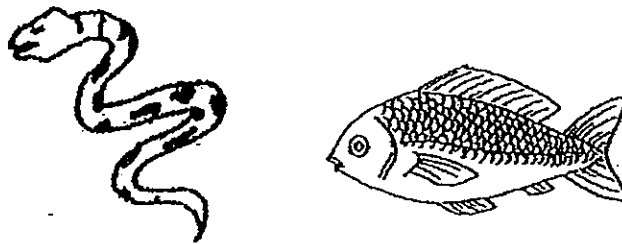
	Non-living things	Living things
(1)	eraser	staghorn fern
(2)	handphone	zebra
(3)	frog	cheese
(4)	bench	toadstool

- 5 The diagram below shows the skeletal system of an animal.



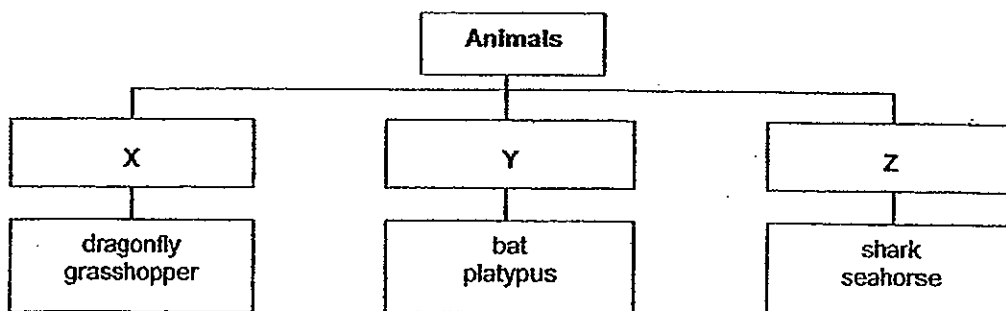
Which of the labelled parts protect the important organs of the animal?

- (1) A and B only
  - (2) B and C only
  - (3) C and D only
  - (4) A, B and D only
- 6 A fish and a snake may be put in the same group because they \_\_\_\_\_



- (1) glide about
- (2) have slimy bodies
- (3) breathe in the same way
- (4) have similar outer coverings

- 7 Study the classification diagram below carefully.



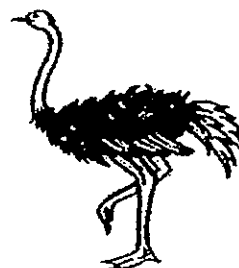
What are the most suitable headings for each group of animals?

	X	Y	Z
(1)	bird	mammal	fish
(2)	insect	mammal	fish
(3)	insect	bird	fish
(4)	insect	bird	mammal

- 8 Study the two animals below.



Eagle



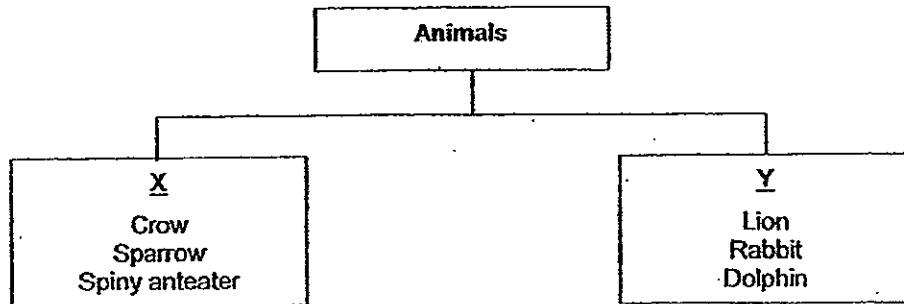
Ostrich

The two animals are different from each other in the \_\_\_\_\_.

- A food they eat
- B way they move
- C way they reproduce

- (1) B only
- (2) C only
- (3) A and B only
- (4) A and C only

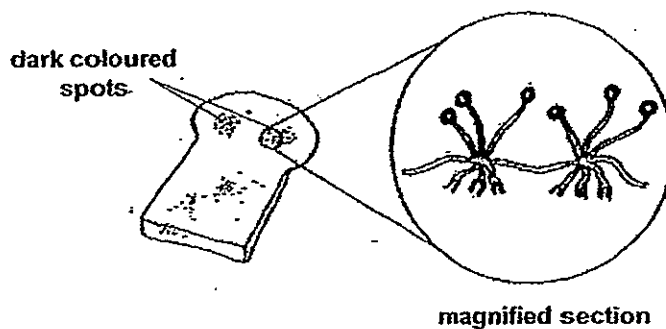
- 9 Some animals are classified into two groups as shown below.



Which of the following best represents X and Y?

	X	Y
(1)	Can fly	Cannot fly
(2)	Eats plants	Eats animals
(3)	Live in the water	Live on land
(4)	Lay eggs	Give birth to live young

- 10 John left a piece of bread on a table untouched. After a week, he observed that some dark coloured spots had formed on the bread.



Which statement(s) describe(s) the dark-coloured spots correctly?

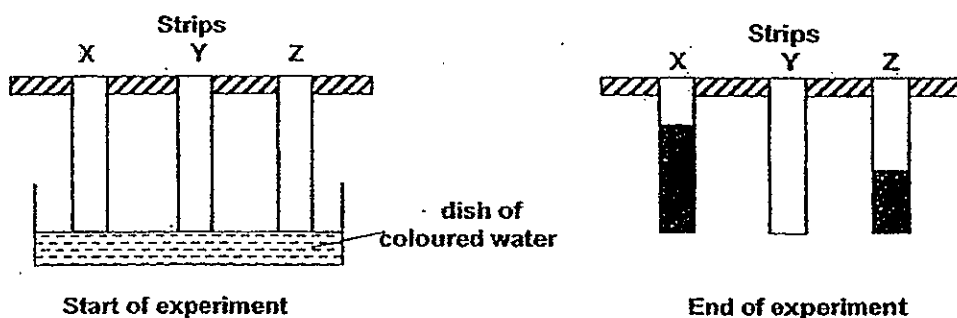
- A They help us to digest the bread better.
- B They are created by yeast used during baking.
- C They contain spores which are needed for the reproduction of mould.

- (1) A only
- (2) B only
- (3) C only
- (4) A, B and C

- 11 Four similar bowls of cooked rice, P, Q, R and S, were placed in different locations with different temperatures and brightness. The table below shows the conditions for each bowl of cooked rice. In which bowl of rice would take the longest time to grow?

	Bowl	Conditions at location	
		Temperature	Brightness
(1)	P	Very Cold (5°C)	Dark
(2)	Q	Cool (14°C)	Dark
(3)	R	Warm (28°C)	Bright
(4)	S	Warm (28°C)	Dark

- 12 Bobby placed three different materials, X, Y and Z, of equal lengths into a shallow dish of coloured water. The diagrams below show how the strips looked like before and after the experiment.



Which of the following materials could X, Y and Z be made of?

	X	Y	Z
(1)	cardboard	plastic	tissue
(2)	plastic	tissue	cardboard
(3)	tissue	plastic	cardboard
(4)	cardboard	tissue	plastic

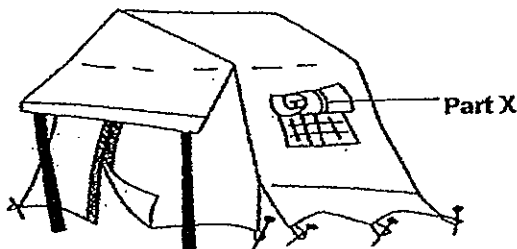


- 13 Standing at a height of 1m from the ground, Gavin dropped a 1kg iron ball once on each of the three identical boxes made from different materials, P, Q and R. The result of his experiment is shown in the table below.

Material of box	P	Q	R
Appearance of the box after the experiment	Slightly damaged	Broke into a few pieces	No change

Based on Gavin's experiment, what can he conclude?

- (1) Material Q is harder than Material P.
  - (2) Material P is harder than Material R.
  - (3) Materials P and Q are harder than Material R.
  - (4) Materials P and R are harder than Material Q.
- 14 The diagram below shows a tent with a part labelled X.



Allan rolled up Part X to allow cool air into the tent. Which of the following properties of Part X will allow him to roll it up?

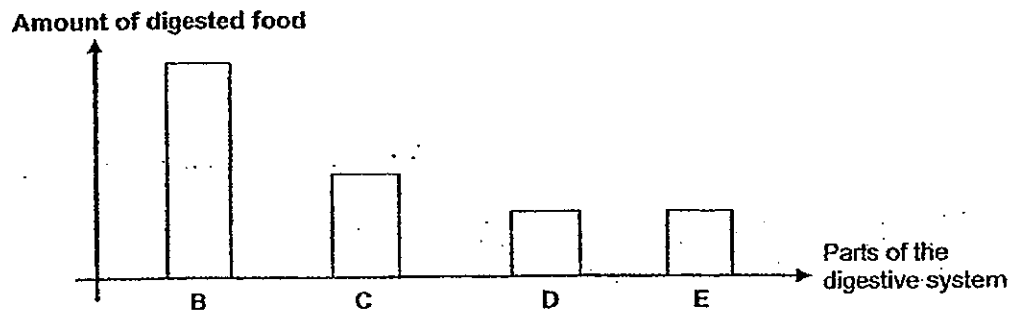
- (1) Texture
  - (2) Strength
  - (3) Flexibility
  - (4) Waterproof
- 15 In the table below, which material does not match its property and use?

	Material	Property	Use
(1)	cloth	flexible	dress
(2)	glass	transparent	gate
(3)	wood	hard	door
(4)	plastic	waterproof	bag

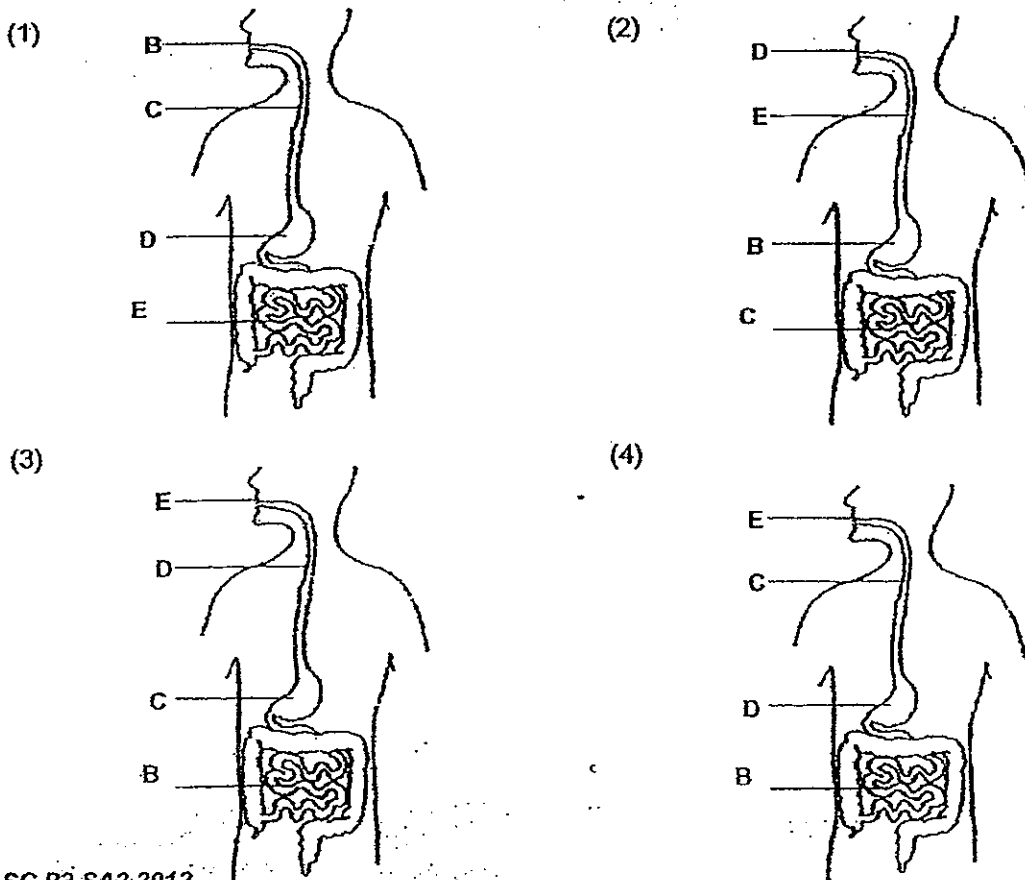
- 16 Undigested food goes into the \_\_\_\_\_ where most of the water is removed from it.

- (1) anus
- (2) rectum
- (3) large intestine
- (4) small intestine

- 17 The graph below shows the amount of digested food in different parts of the digestive system.



Which of the following diagrams matches the graph above?



18 Which of the following statements about a system is definitely true?

- (1) It has only one part.
- (2) It must be complicated.
- (3) It must be a non-living thing.
- (4) It cannot work properly if some parts are faulty.

19 How are our teeth useful in helping in the digestion of food?

- (1) They produce digestive juices.
- (2) They help us to swallow our food.
- (3) They help to tear, chew and grind the food into smaller pieces.
- (4) They help to roll the food particles into balls to ease swallowing.

20 The living things shown below are grouped together based on a common characteristic.



fern



carrot



orchid



banana

The common characteristic is that they all \_\_\_\_\_.

- (1) have flowers
- (2) produce seeds
- (3) can make food
- (4) reproduce by spores

- 21 Some leaves are sorted into two groups as shown below.

Group R	Leaves with toothed edges
Group S	Leaves with entire edges

Which of these leaves should be placed in Group S?



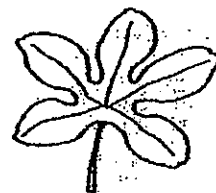
A



B



C



D

- (1) A and B only
- (2) B and C only
- (3) A and D only
- (4) B and D only

- 22 Mr Ang bought 2 pots of plants of the same type and size. He removed all the leaves on Plant B. He watered them daily and left them on a window sill.



Plant A



Plant B

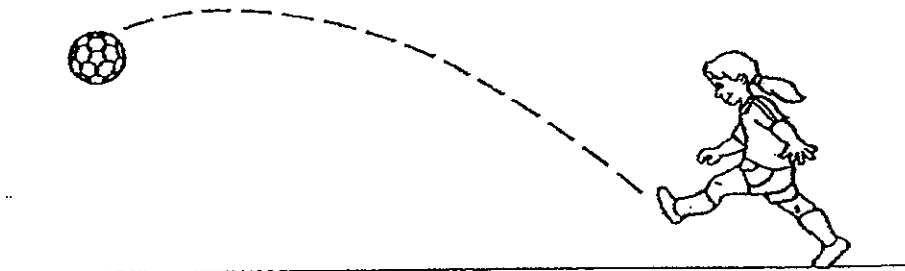
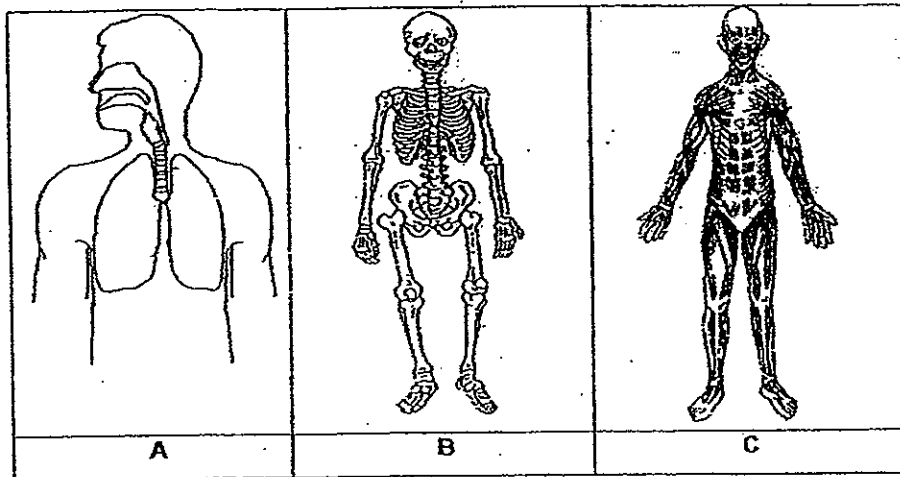
After a week, Mr Ang observed that Plant B had withered while Plant A was growing well. This shows that plants need \_\_\_\_\_.

- (1) air to live
- (2) water to survive
- (3) sunlight to grow
- (4) leaves to make food

23 Which of the following statements correctly describes the function of the lungs?

- (1) It allows gases to exchange.
- (2) It helps to give the body its shape.
- (3) It changes carbon dioxide into oxygen.
- (4) It transports oxygen to the rest of the body.

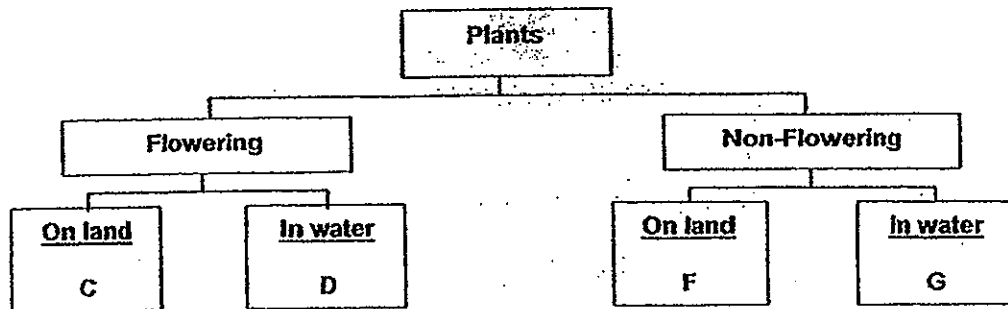
24 The diagrams below show three body systems and Jean kicking a ball.



Which system(s) enable(s) Jean's leg to kick the ball?

- (1) B only
- (2) C only
- (3) B and C only
- (4) A, B and C

25 Study the classification diagram below.



Which of the following statements describes Plant D correctly?

- (1) It is a land plant that produces seeds.
- (2) It is a land plant that produces spores.
- (3) It is a water plant that produces seeds.
- (4) It is a water plant that produces spores.

ANGLO-CHINESE SCHOOL  
(JUNIOR)



SEMESTRAL ASSESSMENT 2 (2012)  
PRIMARY 3

SCIENCE

BOOKLET B

30 October 2012

Tuesday

1 hour 30 minutes

Name : \_\_\_\_\_ ( )

Class : P3-\_\_\_\_\_

**INSTRUCTIONS TO PUPILS**

**DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO**

Follow all instructions carefully.

There are 14 questions in this booklet.

Answer **ALL** questions.

**INFORMATION FOR PUPILS**

The number of marks is given in brackets [ ] at the end of each question or part question.

The total marks for this booklet is 40.

The total time for Booklets A and B is 1 hour 30 minutes.

This question paper consists of 13 printed pages. (Inclusive of cover page)

BOOKLET A	/ 50
BOOKLET B	/ 40
TOTAL	/ 90
Parent's signature/ Date:	

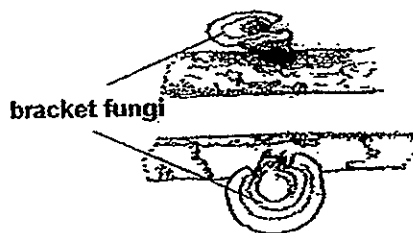




Write your answers to questions 26 to 39 in this booklet.  
Fill in the blanks with the correct answers.

(40 marks)

- 26 Jack and Sam saw some bracket fungi on a dead log on the way home from school.



- (a) Jack told Sam that bracket fungi are plants. Is he correct? Explain your answer. [1]

- (b) Explain why bracket fungi are usually found on dead animals and plants. [1]

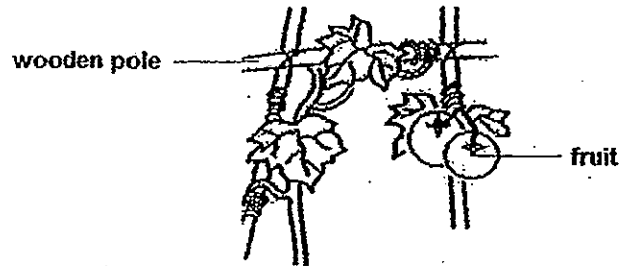
- (c) Jack and Sam carried out an experiment with four similar-sized pieces of wood which they found on their way home. They soaked each piece of wood with 500ml of water for different number of days and placed them at a shady part of the house. They observed and recorded the day which fungi started growing on the wood in the table below.

Wood	Number of days the wood was soaked in water	Day which fungi started to grow on wood
A	0	Day 28
B	1	Day 15
C	2	Day 10
D	4	Day 7

Which of the following conclusions is/are true? Put a tick (✓) beside the statements which is/are true. [1]

Statement	Put a <sup>tick</sup> <del>mark</del> (✓) if the statement is true
Fungi first grew on Wood A.	
All of the pieces of wood had fungi growing on them by day 28	
The longer the wood was soaked in water, the faster fungi started growing on it.	

- 27 The diagram below shows Plant G growing on wooden poles.



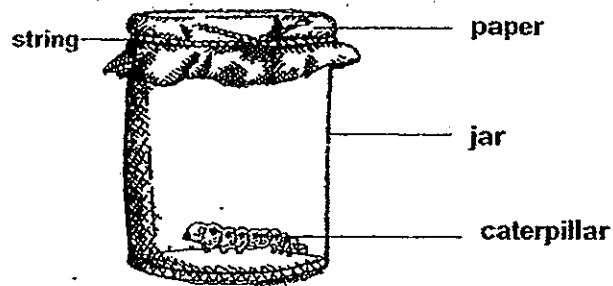
- (a) Which of the following statement(s) is/are true of Plant G? Put a tick (✓) beside the correct statement(s). [1]

Statement	Put a tick (✓) beside the correct statement(s).
It has a weak stem.	
It bears flowers.	
Its leaves have smooth edges.	

- (b) How does the wooden pole help the plant? [1]

---

- 28 Betty caught a caterpillar and placed it in the jar shown below.



- (a) What will happen to the caterpillar? Why? [1]

---

- (b) List two things that Betty should do to help her caterpillar stay alive so that it can become a butterfly eventually? [1]

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Sub-total:

- 29 Jovan gave animal K different kinds of food and a fresh bowl of water. The table below shows the amount of corn, worms, fish and ~~grass~~ <sup>water plants</sup> left at the end of two days.

Type of food	Corn	Worms	Fish	Water plants
Amount of food given on 1 <sup>st</sup> day (grams)	100	100	100	100
Amount of food left at the end of 2 <sup>nd</sup> day (grams)	97	68	25	42

- (a) Based on the above information, does animal K eat only plants or animals or both plants and animals? [1]

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- (b) Which type of food did animal K like most? What information from the table tells you so? [1]

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- (c) Jovan observed that animal K had the following characteristics.
- It has webbed feet.
  - It has feathers.
  - It can fly.

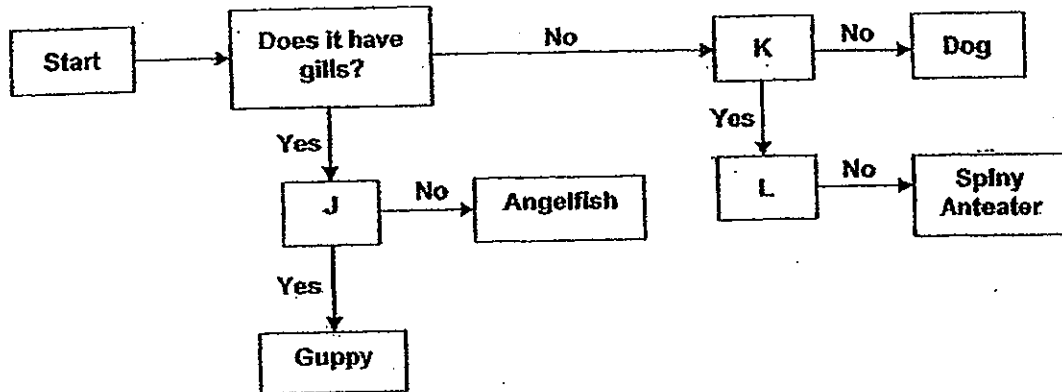
Which animal group does animal K most likely belong to? Explain your answer based on the information given above. [1]

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30 Study the chart below.



- (a) The letters, J, K and L, in the chart represent questions that help to classify the animals. Write the letters, J, K and L, in the correct boxes below to indicate the question they represent. Each letter can only be used once. [3]

Question	Letter
Can it fly?	
Does it lay eggs?	
Does it give birth to its young alive?	

- (b) Based on the information above, how is the dog different from the angelfish? [1]

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- 31 (a) In the mouth, substance X mixes with food to break it down into smaller forms. What is substance X? [1]

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- (b) Name all the part(s) of the digestive system where digestion takes place. [1]

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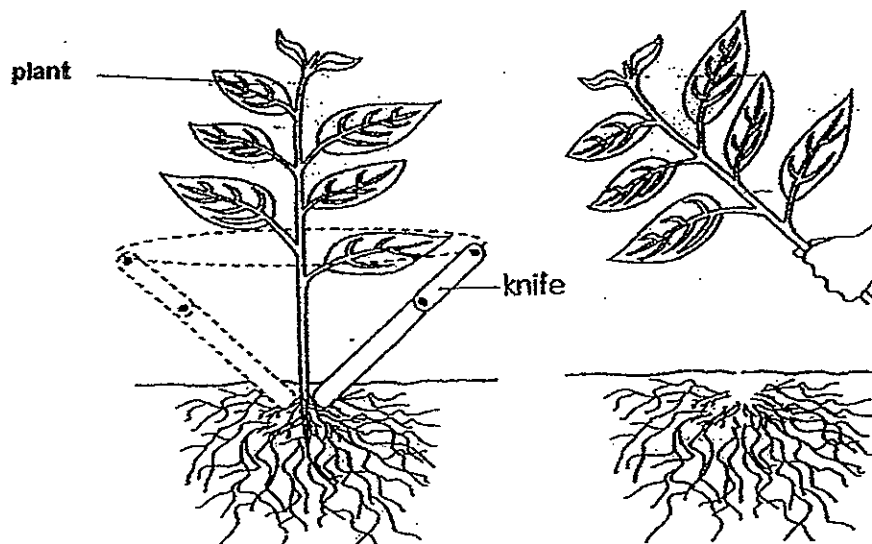
- (c) What happens to the food that has been digested? [1]

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- 32 Rick tried to pull out a plant from the ground but had difficulties doing that. Hence, he decided to use a knife to cut the roots all around the plant before pulling it out from the ground as shown below.



- (a) Why did Rick find it difficult to pull the plant out of the ground at first? [1]
- \_\_\_\_\_
- (b) Rick then planted the plant in a pot of soil. He watered it and put it at a sunny spot in his garden. However, he observed that the plant started to wilt after two days. Explain his observation. [1]
- \_\_\_\_\_
- \_\_\_\_\_

- 33 The pictures below show how Liza classified some animals.

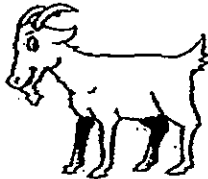


Group R	Group S
  	  

- (a) Write suitable headings for Group R and Group S. [1]

Group R: \_\_\_\_\_

Group S: \_\_\_\_\_

- (b) Liza could further classify the animals in Group S into 2 groups as shown below.

Group T	Group U
	 

Describe how the above groups of animals are different in the way they move. [1]

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- (c) Liza grouped the animal below together with the rest in Group U.

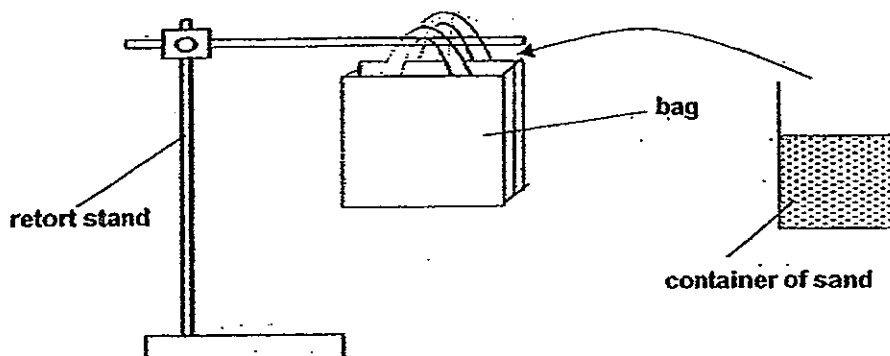


Which characteristic did she use to group the three animals together? [1]

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<p>Score</p> <p>Mark</p>
--------------------------

- 34 Joshua conducted a test on Bags A, B and C which are made of different materials as shown below.



He poured sand into each bag slowly until the handle of the bag broke. He recorded the results in the table shown below.

	Mass of sand added before the handle of the bag broke (grams)
Bag A	483
Bag B	285
Bag C	920

- (a) Arrange the three bags according to their strength. Begin with the one which is the strongest. [1]

\_\_\_\_\_

- (b) Joshua's mother bought a packet of sugar that weighs 500 grams and wants to carry it home from the supermarket. Which bag, A, B or C, should she use? Explain your choice. [1]

\_\_\_\_\_

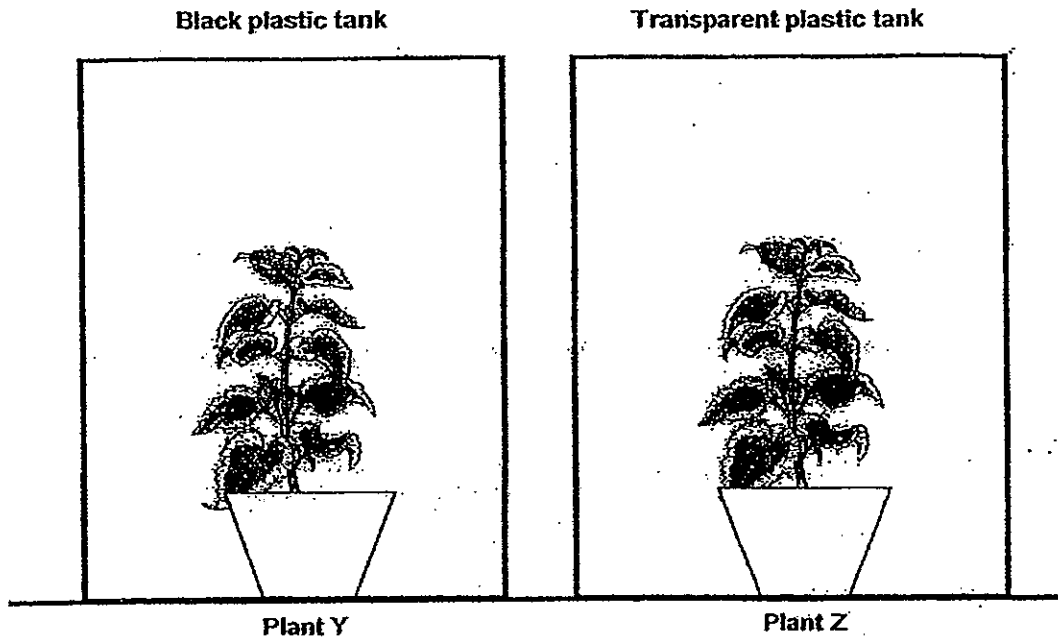
\_\_\_\_\_

- (c) Joshua was told that the bags were made of cloth, leather and paper. Which bag, A, B or C is most likely made of paper? [1]

Bag made of paper: \_\_\_\_\_

35

Clare wanted to test if plants need sunlight to make food. She placed two similar plants in two different tanks as shown below. The plants were given the same amount of water and placed near each other in a sunny spot in the garden for two weeks.



At the end of the two weeks, Clare observed that Plant Z continued to look healthy but Plant Y was wilting.

- (a) Based on the results of Clare's experiment, what can Clare conclude? [1]

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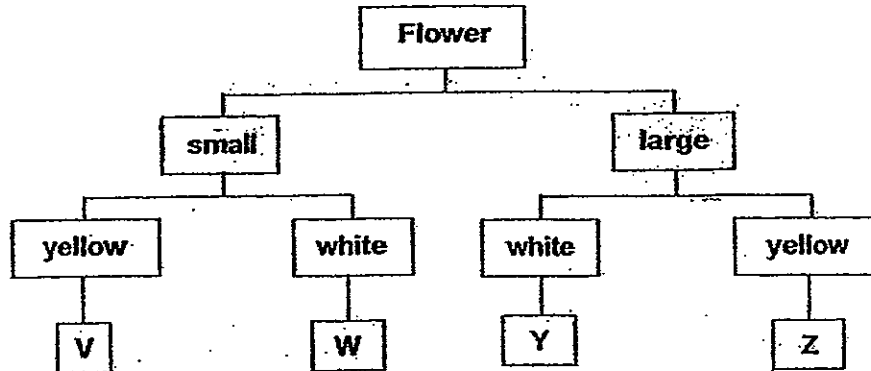
- (b) What else do/does plants need in order to survive? [1]

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36

Andrew observed some animals and the flowers they visit. He classified the flowers in the chart below and recorded the characteristics of the flowers which attract different animals in the table as shown.



Animal	Characteristics of flowers	
	Size	Colour
J	small	bright blue or yellow
K	large	white
L	small	white
M	large	red or yellow
N	large	white

- (a) Based on the information in the table, which animal(s) would be attracted to large white flowers? [1]

\_\_\_\_\_

- (b) Compare flowers W and Y. How are they different? [1]

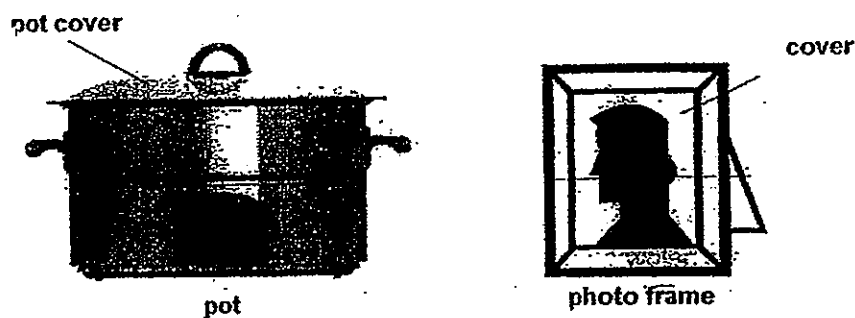
\_\_\_\_\_

- (c) Based on the chart and table, identify the animals which will visit flowers V and Z. [1]

Flower V: \_\_\_\_\_

Flower Z: \_\_\_\_\_

- 37 Mark went shopping with his mother. They bought a pot and a photo frame as shown below.



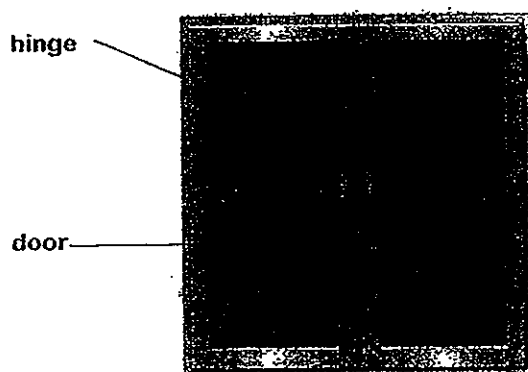
- (a) The pot which his mother bought allows her to see the things which she is cooking. Which of the following materials, glass, metal or plastic, is most suitable for making the pot cover? [1]

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- (b) What is the common property between the materials used to make the pot cover and the cover of the photo frame? [1]

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- (c) When Mark got home, he noticed that the hinges fixed on his house doors are made of metal.



Name the property of metal which makes it suitable for making hinges. [1]

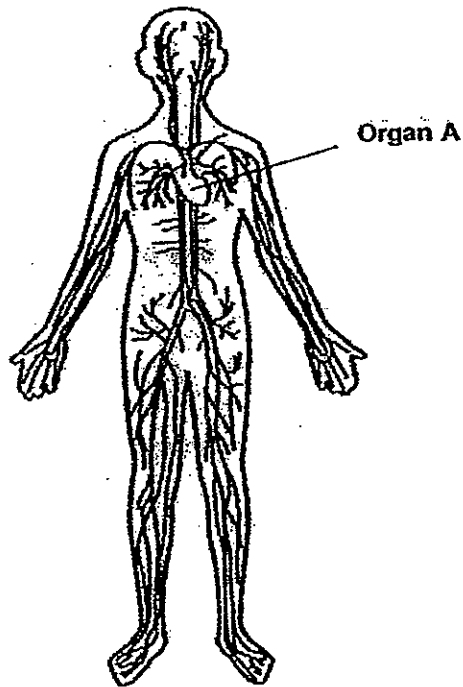
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- 38 (a) Our skeletal system protects our delicate organs, like our skull. What are the other two functions of the skeletal system? [2]

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- (b) The diagram below shows some human body systems.



- (i) Name the organ labelled A. [1]

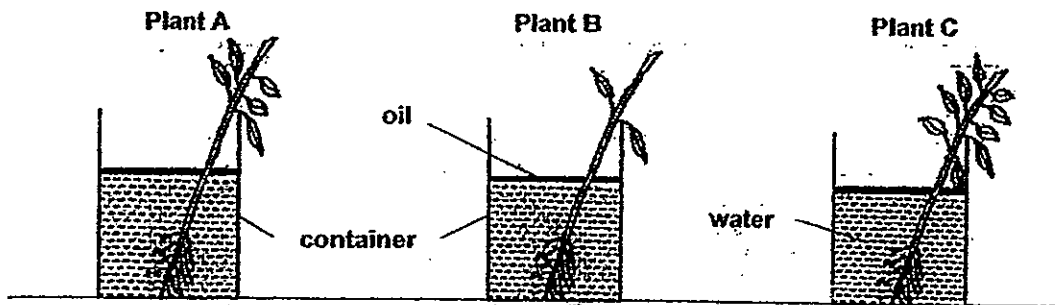
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- (ii) Which part of the skeletal system protects organ A? [1]

---

27

- 39 Three similar plants were placed into 3 identical containers filled with 200ml of water. A layer of oil was poured into each container to prevent the water from evaporating into the air. The volume of water in each container was recorded at the end of the 6<sup>th</sup> day in the table below.



Plant	Volume of water (ml)	
	Day 1	Day 6
A	200	175
B	200	190
C	200	160

- (a) Which plant, A, B or C, took in the most amount of water? [1]

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- (b) Based on your observation of the 3 plants, why did they take in different volumes of water? [1]

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- (c) Based on the above experiment, state the characteristic of living things displayed by the plants. [1]

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# Answer Ke

## EXAM PAPER 2012

SCHOOL : ANGLO-CHINESE SCHOOL(JUNIOR)

SUBJECT : PRIMARY 3 - SCIENCE

TERM : SA 2

### BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
4	3	4	3	1	4	2	3	4	3	1	3	4	3	2	3

Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
3	4	3	3	1	4	1	4	3

### BOOKLET B

26. a) Jack is wrong. Unlike plants, the bracket fungi does not make its own food.

b) Bracket fungi feed on dead animals and plants

c)

Statement	Put a tick if the statement is true
Fungi first grew on wood A	
All of the pieces of wood had fungi growing on them by day 28	✓
The longer the wood was soaked in water, the faster fungi started growing on it.	✓

27. a)

Statement	Put a tick beside the correct statement(s)
It has a weak stem.	✓
It bears flowers.	✓
Its leaves have smooth edges.	

b) The plant clings on it to reach out for sunlight.

28. a) It will die. It doesn't have food, water and air.

b) Poke holes in the paper and give the caterpillar some fresh leaves to eat.

29. a) Animal K eats both plants and animals.

b) Fish. It has the least number at the end of the second day.

c) Animal K belongs to the bird group. Some birds have webbed feet, but all birds feathers and some can fly.

30. a)

Question	Letter
Can it fly?	L
Does it lay eggs?	K
Does it give birth to its young alive?	J

b) The dog does not have gills while the angelfish does.

31. a) Substance X is saliva.

b) Mouth, stomach and the small intestine.

c) It goes through the bloodstream where it is transported to other parts of the body.

32. a) The plant roots were holding the plant firmly to the ground.

b) It did not get the water since there were no roots. The roots take in water and mineral salts.

33. a) Group R: Insect      Group S: Mammal

b) The animal in group T walks while the animals in group U swim.

c) They swim.

34. a) Bag C, bag A, bag B

b) She should use bag C. Bag C can carry the most mass of sand. The mass was higher than 500 grams.

c) Bag B

35. a) Leaves make food from sunlight. The plant needed food but there was no food so it wilted.

b) Plants need air and water to survive.

36. a) Animals K and N would be attracted to large white flowers.

b) Flower W is small while flower Y is large.

c) Flower V: Animal J      Flower Z: Animal M

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- 37. a) Glass**  
b) Both are transparent.  
c) Strong.

- 38. a) It gives the body its shape and works with the muscular system to enable the body to move.**  
b) i) Heart                      ii) The ribcage

- 39. a) Plant C.**  
b) They needed more water as each of them had different number of leaves.  
c) Living things need water to survive.

